NATIONAL WEATHER SERVICE

Western Region Notes

OCTOBER 21, 2004

REGIONAL DIRECTOR'S OFFICE

Western Region Gold and Silver Medal Winners: The 2004 DOC Gold and Silver Medal winners have been announced, and several WR individuals and groups will receive the honor. Please join me in congratulating our winners!

Gold Medal

Daryl Onton and Benjamin Peterson (WFO Flagstaff) --- Daryl and Ben will be recognized for exceptional forecasts and communication on July 15, 2003, which were responsible for saving the lives of 200 firefighters on the Kinishba Fire.

Jim Purpura (WFO San Diego) --- Jim Purpura (San Diego MIC) will receive a joint award with Vincent Wood (NSSL, Norman OK) for instituting a program of disseminating NOAA's National Weather Service hazardous weather warnings to the Oklahoma deaf and hard-of-hearing community through alphanumeric pagers.

Silver Medal

WFO Oxnard and WFO San Diego --- WFOs Oxnard and San Diego will be recognized for excellent weather support to firefighting personnel during the Southern California Wildfires of October and November 2003.

AROUND THE REGION

WRH Holds Halloween Bake Sale: Western Region Headquarters organized a bake sale on October 14. Staff members from each division brought a variety of goodies, including cupcakes, popcorn balls, cookies, caramel apples, donuts, and more. The bake sale raised $201.45, and proceeds were donated to the Red Cross Disaster Relief Fund. The event was organized by Melissa Smith (HCSD), Andrea Bair (HCSD), and Kristie O'Connor (SOD).

Photo of the Week: Steve Goldstein (WFO Sacramento Lead Forecaster) and David Pike (WFO Reno IT) recently scaled Mt Kilimanjaro, at 3 degrees south of the equator. Steve brought along a handheld weather instrument, hanging just below the NOAA emblem (how did that get there?) and recorded the following at the top (5860 m asl)

Temp: 22° F RH : 74%
Pres: 508mb Wind: SE at 6 mph

METEOROLOGICAL SERVICES DIVISION

Statement of the Week: Two winter storms affected Western Region this week. The second and strongest storm heavily impacted California on Tuesday and Wednesday. All WFOs serving California provided excellent information to their customers both before and during this sudden change to winter weather. Among the frequent statements issued by WFO Los Angeles/Oxnard was the following Marine Weather Statement (MWS). This MWS provided an excellent overview of the rough and hazardous seas expected off the southern California coast.

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE LOS ANGELES / OXNARD CA
400 AM PDT TUE OCT 19 2004

……GALE FORCE WINDS WILL DEVELOP ACROSS ZONE 670 TODAY……

……SMALL CRAFT ADVISORIES ARE POSTED FOR ALL OTHER COASTAL ZONES THROUGH TONIGHT……

……INCREASING LARGE SWELLS WILL MOVE INTO COASTAL WATERS TONIGHT THROUGH THURSDAY……

A POWERFUL GULF OF ALASKA STORM WILL MOVE THROUGH THE COASTAL WATERS OF CENTRAL AND SOUTHERN CALIFORNIA TONIGHT THROUGH WEDNESDAY. IT WILL GENERATE A LARGE NORTHWESTERLY SWELL AND STRONG SOUTHERLY WINDS OVER ALL OF THE COASTAL WATERS. OVER THE OUTER WATERS……COMBINED SEAS WILL REACH 15 FEET STARTING LATE TONIGHT AND PEAK WEDNESDAY AFTERNOON THROUGH THURSDAY. THE SWELL ACROSS THE INNER WATERS WILL INCREASE TO 5 TO 7 FEET DURING THE SAME PERIOD.

IN ADDITION……THE INNER WATERS WILL EXPERIENCE SOUTHEAST WINDS UP TO 25 KNOTS THIS AFTERNOON THROUGH TONIGHT.

MARINERS SHOULD KEEP ABREAST OF THE LATEST WIND FORECASTS DURING THE DAY AS CONDITIONS DEVELOP.

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WFOs From Oregon, Washington, and Idaho Participate in Winter Weather Awareness Week: During the week of October 3-9, the WFOs from Oregon, Washington, and Idaho jointly conducted a Winter Weather Awareness Week. Planning for this event began in August with WCMs from the Pacific Northwest offices choosing various winter weather topics to develop into daily Public Information Statements (PNSs). Shortened versions of the PNSs were also developed for use on NOAA Weather Radio (NWR). Once finalized, the PNSs were shared with local TV stations and newspapers the week prior to the awareness week for use in broadcasts and daily

editions during the campaign. The Governors of each state were approached with a proposal to proclaim the first week of October as Winter Weather Awareness Week. Also, with the help of FEMA, participating WCMs recorded sound bites for daily FEMA Radio spots.

Throughout the week, all offices involved issued the daily winter weather PNSs which were accessible through each office's web site and NWR. The campaign resulted in numerous radio interviews including a few live in-studio interviews. The winter weather information also made it into many television news stories with one interview taped on the set of Northwest Cable News. Governor's proclamations were able to be secured for Washington and Idaho. In the end, the Pacific Northwest's Winter Weather Awareness Week was a great success.

(L to R) Dan Lieberg, Montana Disaster and Emergency Services; Vickie Nadolski, WR Director; Julie Adolphson, Glasgow MIC; and Robert Nikolaisen and Gerald Kohler, Sheridan County Commissioners

Eight StormReady Sites in Northeastern Montana: WFO Glasgow WCM Tanja Fransen recently completed work with two counties and six communities in northeastern Montana to designate them as new StormReady sites.

Richland County, as well as the communities of Sidney and Fairview were recognized on Monday, October 4. Sheridan County and the communities of Medicine Lake, Outlook, Plentywood, and Westby were recognized on Tuesday, October 5.

WFO Seattle Hosts NOAA Weather Radio Awareness Month: September was "Weather Radio Awareness Month" in Washington State. The campaign was conducted in partnership with Washington State Emergency Management. This year's goal was to encourage people to obtain weather radios, in the hope that they become as common as smoke detectors in homes, businesses, and schools, etc. The campaign slogan was "Weather Radio is your personal homeland security warning system". The campaign had a number of activities, including:

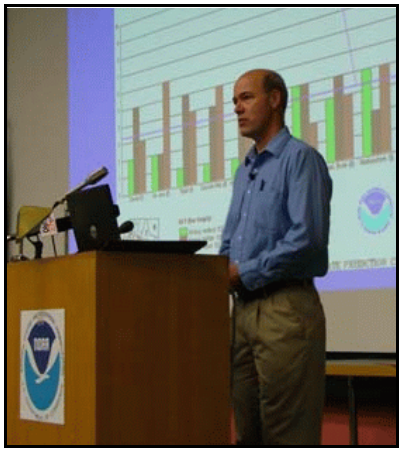
- A Governor's proclamation
- Ten NOAA Weather Radio manufacturers and vendors offering consumer incentives via a special web site set up for the campaign
- Articles on web sites and in newsletters (including: Washington Association of Broadcasters newsletter, American Red Cross chapter web sites, and the City of Redmond's Community Magazine)
- Guest editorials in daily and weekly newspapers (e.g. Seattle Post Intelligencer)
- Media interviews
- Public Service Announcements sent to broadcasters
- A booth at the September "DeafNation 2004" event at the Seattle Center Exposition Hall

WFO Seattle WCM Ted Buehner is interviewed during KXRO Radio's "The Morning Show."

NWS offices in Seattle, Spokane, Portland, and Pendleton also provided links to the state emergency management campaign web site on their NWS web pages and aired a special announcement on their NWR stations. In addition, Washington State Emergency Management provided campaign materials to schools, media, and the emergency management community throughout the state. To view the campaign web site, go to http://emd.wa.gov and click on "Preparedness".

Seattle WCM Ted Buehner holds up a StormReady sign and this year's National Lightning Awareness poster.

Seattle Emergency Management Conference: The Washington State Emergency Management Association conference was held September 20-23 in Ocean Shores, Washington, site of the nation's first TsunamiReady community. WFO Seattle WCM Ted Buehner staffed a NWS booth and gave a presentation on the Storm/TsunamiReady program. He also distributed several copies of this year's national "Lightning Safety Awareness" campaign poster, featuring Torii Hunter of the Minnesota Twins. The booth highlighted the National Digital Forecast Database (NDFD), and All-Hazards NOAA Weather Radio. Conference attendance was 140 -- the largest crowd ever for this event.



WFO Seattle Science Operations Officer Brad Colman provides a briefing on the Winter Weather Outlook at the Emergency Management Workshop

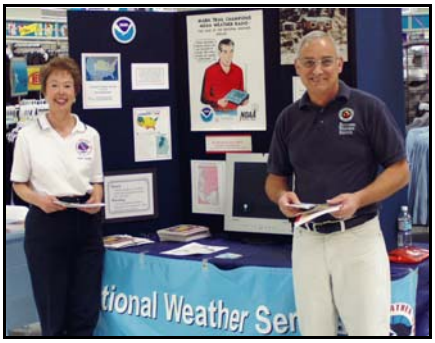
WFO Seattle Holds Media and Emergency Management Workshops: WFO Seattle held Media and Emergency Management Workshops on October 5-6. Nearly 100 people attended these workshops, which included broadcast and newsprint media, on-air weather personalities, and representatives of public/private sector emergency management, school districts, power utilities, the American Red Cross, and Washington State Department of Transportation.

The workshop agenda included an overview of the Climate Prediction Center's Winter Weather Outlook, updates on NWS products and services, the October U.S. Postal Service cloud stamp program, and information on the Pacific Northwest Winter Weather Awareness Week and NWS hydrologic/flood services. Presentations were given by the Northwest River Forecast Center, the Northwest Weather and Avalanche Center, and the Puget Sound Clean Air Agency. Media interviews were also conducted.

Don Whitlow (left) and Joe Sirard (center) interact with a marine customer at the International Sail and Power Boat Show.

WFO Oxnard Supports International Sail and Power Boat Show: For the seventh consecutive year, WFO Los Angeles/Oxnard staffed a booth at the International Sail and Power Boat Show, held in Long Beach September 23-26. This year WFO Los Angeles/Oxnard partnered with WFO San Diego to support the event.

This boat show is the largest event of its kind on the West Coast, and approximately 500 people stopped by the NWS booth during the event. Joe Sirard (WFO Oxnard) and Don Whitlow (WFO San Diego) interacted with marine customers, providing them with information on boater safety and NWS marine weather products and services. A wide variety of marine weather safety awareness pamphlets and brochures were given out, as well as the ever-popular cloud and hurricane tracking charts.



WFO Boise Participates in Health and Safety Fair: WFO Boise took part in a Health and Safety Fair at a local Wal-Mart store on October 8-9. The Boise staff handed out hundreds of safety pamphlets. Pictured here are Susan Wines and Darrell Huston of WFO Boise.

WFO San Diego Provides Winter Outlook Briefing: WFO San Diego WCM Ed Clark recently provided a Winter Weather Outlook briefing to the ALERT users group of California at the San Diego Emergency Operations Center. Flash flood criteria in burn areas of San Diego County was also discussed. Also in attendance were Flood Control agencies from San Bernardino, Riverside, and San Diego Counties, and staff from the California Nevada River Forecast Center.

Spokane WCM Ken Holmes shows off the display booth

WFOs Pocatello & Spokane Participate in the Idaho Science Teachers Association Conference: WCMs Ken Holmes (Spokane) and Vernon Preston (Pocatello) provided valuable information to over 800 science teachers from Idaho and eastern Washington. Special science education materials on the weather of the Lewis and Clark Expedition highlighted the NWS display booth, which was designed and researched by WCM Vernon Preston. Teachers praised the information provided and indicated they used information from the NWS web pages in their classroom activities. Popular handouts among the science teachers were the "Disaster Safety Action Wheel," NOAA cloud poster, lightning safety posters, and a handout providing

information on educational materials available online from NOAA and the NWS. Overwhelmingly, the most sought after handout was the newly designed "Watch Out - Storms Ahead!" Owlie Skywarn Weather Book. Over 100 of these books were distributed during the conference, with additional mailings made as the staff ran out.

WFO Portland and NWRFC hold Open House: WFO Portland and the Northwest River Forecast Center held an Open House on Saturday, October 9, 2004. Even though there was cool, showery weather in Portland that day, it didn't deter the local community from coming out to see what's new at the NWS. One-hundred eighty people attended the event and expressed a genuine interest in what we do with equal interest in meteorology and hydrology. The WFO and RFC staff gave presentations every 30 minutes, conducted tours of the operations area, had a display of a rawinsonde and F-420 wind equipment, and explained the unique aspects of making forecasts for several different user groups. All-in-all, the Open House was a bit hit with the local community with lots of positive feedback from the attendees.

SCIENTIFIC SERVICES DIVISION

Western Region Visitview on NDFD and Verification: On Tuesday October 19, John Horel and David Myrick (University of Utah, CIRP) led a VisitView session entitled "Verification of NDFD Forecasts over the Western United States" for Western Region offices. Twenty sites from Western Region were able to attend the first session. The teletraining session is focused on work being done at the University of Utah on verification of Western Region NDFD forecasts using the ARPS Data Assimilation System (ADAS) and Rapid Update Cycle (RUC) analysis as well as the issues behind producing a quality analysis in complex terrain. This training was requested specifically for forecasters at WR WFOs and RFCs by the Western Region Grid Quality team at the Western Region MIC/HIC meeting in May. A second session is scheduled for **Tuesday October 26th at 12:00 MDT** in order to maximize the number of staff in Western Region able to attend the training.

New WEB Forecast Pages: This is the new two step web page based on the IFPS grids.

First forecast page: Icons come from the grids (a point defined in each zone by the office web master), and the words come from the office ZFP (which comes from your GFE). This is done because selecting an exact point from the welcome page map is very difficult. Both forecast pages now use the NWS standardized look.

Second forecast page: Click on the small map with terrain. A point forecast is displayed where both the words and icons come from the grids. Please note the forecast differences around mountains or near the ocean, and note elevation and forecast difference. Since the page is new, we also expect to make a number of minor changes to evolve the page.

Bookmarks: During this change, users will have to re-bookmark pages that are deeply embedded within the Forecast Office web site (example: a data page that is found through using the left hand menu). To re-establish your bookmark, simply access the Forecast Office main page, using the left hand menu, find the page you had previously bookmarked and re-save this new bookmark.

URL Changes: The following URLs will now link you to the office welcome page.

The current link to the office welcome page is: http://www.wrh.noaa.gov/pocatello. This bookmark will continue to work. The new links to the office welcome page will be: http://www.wrh.noaa.gov/pih or weather.gov/pocatello.

2004 Intermountain Workshop: The Eleventh Annual Workshop on Weather Prediction in the Intermountain West will be held on **Thursday, November 4, 2004** at the University of Utah Huntsman Cancer Institute. A tentative schedule for the 2004 Intermountain Weather Workshop, is now available from the conference web page: http://www.met.utah.edu/jimsteen/cirp/workshop2004/ or directly at: http://www.met.utah.edu/jimsteen/cirp/workshop2004/conference_program_04.html

The registration deadline is October 15. The theme of the workshop is "Impacts of Intermountain Anticyclones," and priority will be given to abstracts related to valley and basin cold pools, fog, air pollution, the North American Monsoon, and drought. Abstracts related to other areas of Intermountain meteorology and weather prediction will also be given consideration. Presentations may be given orally or as a poster, with the number of oral presentation limited. There are no fees associated with the Workshop. The workshop is being hosted by the NOAA Cooperative Institute for Regional Prediction http://www.met.utah.edu/jhorel/cirp.

RPG 6 Build Deployment and Training: The RPG Build 6 deployment began on September 30. WDTB has prepared operator training to support this build. All Build 6 training materials are available on http://www.wdtb.noaa.gov/modules/RPG6/index.html.

Each site will receive a copy of the training document with the deployment kit. Additional copies can be downloaded and printed from this page. You will also find a training presentation on this page that is a streaming technology. No download required. In continuous playback, it will take just over 30 minutes to complete.

Major Changes at COMET: COMET has reworked their web site. You can find the new web site at http://meted.ucar.edu/.

A new COMET web module is available on the theory and use of ensemble prediction systems (EPS): Ensemble Forecasting Explained. This module, a part of our series on Numerical Weather Prediction, will help forecasters develop an understanding of the basis for EPSs, the tools used to interpret their performance and output, and their use in the forecast process.

The module contains six sections: an Introduction, which briefly covers the background theory on which ensemble prediction is based; Generation, which describes how ensemble systems are constructed; Statistical Concepts, which gives a refresher on knowledge required for ensemble product interpretation; Summarizing Data, which describes common ensemble forecast products that consolidate the huge volumes of information provided by EPSs; Verification, which discusses how EPSs performance is assessed and documented; and Case Applications, which provides links to a number of forecast cases illustrating the interpretation and use of EPSs in the forecast process.

In preparation for the winter season, there are four COMET training modules that are good candidates for local winter refresher training. Each of the modules takes approximately an hour to complete

The four modules are:

1. *Dynamics and Microphysics of Cool-Season Orographic Storms:* A good review of cloud physics and western U.S. mountain precipitation events (snow storms).
2. *Low-Level Coastal Jets:* A tutorial on low level jet theory and forecasting tips along the west coast.
3. *Fog and Stratus Forecast Approaches:* A good review of fog formation basics. The training module may be especially useful for offices that deal with persistent winter-time fog events.
4. *Rip Currents: NWS Mission and Partnerships:* A brief explanation of where NWSH will be evolving the program.

AWOC Course Description:
The Advanced Warning Operations Course (AWOC) will initially consist of two tracks —— Core Track and Severe Weather Track. A Winter Weather track has been added to the end of the course. Each track contains approximately 14 hours of training material (includes evaluation components). The course will be facilitated on site by an onsite facilitator (SOO, DOH, or locally appointed training officer). The AWOC will begin in October 2004 and will include a combination of distance learning technologies including teletraining, web-based training, computer-based training on CD-ROM, Weather Event Simulator (WES) simulations, and printed material. The course is designed to allow every NWS Forecaster (Meteorologist and Hydrologist) to participate. Each instructional component as described below will include a separate evaluation component that will be tracked by the AWOC on-site facilitator. Pre-test options will be available for many of the instructional components.

AWOC Core Track:

1. *Decision Making in a Warning Environment Brief Description:*
   The content will focus on various aspects of decision making as it pertains to the operational warning environment. This will include the three levels of situation awareness and how they are accounted for in the warning process. In addition, the meaning and value of expertise, as well as strategies for acquiring it, will be presented.
   Delivery Methods: Teletraining, printed materials, and web support materials
   Approximate Completion Time: 4 hours

2. *Effective Office Warning Strategies Brief Description:*
   The content will focus on putting together strategies which will allow the decision maker to make the best use of their skills and those of the warning team. This will include ways to manage workload and heighten communication. The benefits and challenges of coordination both within the office and with external partners will be illustrated.
   Delivery Methods: Teletraining, printed materials, and support materials
   Approximate Completion Time: 2.5 hours

3. Data Quality Brief Description:
   Radar, satellite, radar/satellite integration, ground truth and VCP Explorer are some of the topics that will be covered in this block. Emphasis will be on the impacts of

poor data quality, strengths and limitations of various sensors, and optimum utilization of the various sensors to improve/mitigate data quality issues.
Delivery Methods: CD and web module
Approximate Completion Time: 2.5 hours

4. *Societal Impacts and Public Perception Brief Description:*
This instructional component will explore the place of weather warnings in a sociological context, and identify elements of an effective warning.
Delivery Methods: web module *Approximate Completion Time:* 2.5 hours

AWOC Severe Weather Track:

1. *Conceptual Models for Origins and Evolutions of Convective Storms and Systems Brief Description:*
Content will focus on recent (1994- present) research on conceptual models that describe important processes in convective storms or storm systems. Formation mechanisms and environmental parameters for supercell and squall line tornadoes, hail, high winds (wet and dry microbursts, bow echoes, derechos), and flash flooding (meteorological considerations) will be described.
Delivery Methods: web module
Approximate Completion Time: 2 hours

2. *Mesoanalysis for the Warning Forecaster Brief Description:*
This component will identify products and procedures for effective data analysis in completing short-term forecast job tasks (i.e., what a mesoanalysist should do in a severe weather warning methodology).
Delivery Method: web module
Approximate Completion Time: 1.5 hours

3. *Storm Interrogation Strategies Brief Description:*
Topics in this section include methods to determine the qualitative strength of an updraft and its relation to most severe weather reports, techniques to determine the updraft location for sheared storms, and identifying characteristics of tornadoes, flash floods, hail, and damaging winds.
Delivery Method: web module
Approximate Completion Time: 2.5 hours

4. *Application and Review of AWOC Severe Weather Track Brief Description:*
This instructional component will use a case or two to review and illustrate the important considerations that a warning forecaster should apply in an effective warning methodology. This review will include components of threat assessment and storm interrogation strategies.
Delivery Methods: Teletraining and a printed student guide.
Approximate Completion Time: 1.5 hours

5. *Simulations Brief Description:*
Four simulations, complete with simulation guides, will be released with the AWOC. SOOs may choose to use these simulations as the simulations in the AWOC, or they may use them as a reference to develop their own local

simulations for AWOC. The simulations in the AWOC can be used to fulfill the annual WES requirement of two simulations for the convective season.
Delivery Methods: Weather Event Simulator (WES) data with supporting simulation guides.
Approximate Completion Time: 5 hours (2.5 hours per simulation with 2 simulations

The Virtual Institute for Satellite Integration Training: Offices can register for the VISIT teletraining sessions by sending email to: visit@comet.ucar.edu. The teletraining calendar, including November and December, is at: http://www.cira.colostate.edu/ramm/visit/ecal.asp.

Note: Teletraining planning calendar with sessions offered by the Interactive Forecast Preparation System PDS and Warning Decision Training Branch including 18 AWOC teletraining sessions is at: http://www.cira.colostate.edu/ramm/visit/planning.html.

The VISIT team at CIRA is working on a new session "Utilizing Satellite Imagery for Analyses of Winter Storms". The session will be announced when it is ready.

All sessions can be reviewed at any time by following the instructions in the student guides available on the ISTPDS/VISIT training session page: http://www.cira.colostate.edu/ramm/visit/ts.html

SYSTEMS OPERATIONS DIVISION

Facilities Work at Flagstaff: FET Mike Belarde provides Facilities support to the Arizona Offices. Mike is stationed out of WFO Spokane and also services WFOs Pendleton and Seattle, but due to current short staffing, Mike was detailed to the Arizona area were he provided routine Facilities support as well as numerous back logged items. He also assisted FET Tom Page install a new generator to support the Nogales NWR.

Mount Ashland Facilities Work: FET Dan Clark provides Facilities support at the Mt. Ashland NEXRAD site. Dan spent numerous weeks on the road this past summer attending to a laundry list of Facilities items for this unusual site, which due to its location, presents many challenges including a very short window of work opportunity. Dan worked hard at these much needed improvements while coordinating the efforts of numerous contractors.

Facilities Conference: Electronics & Facilities Branch Chief Sean Wink attended a Facilities conference held in Kansas City. Numerous Facilities issues were discussed including the incorporation of Facilities Maintenance into the EMRS system, which is scheduled to start on November 8.

SOD/CIO Meeting: Bob Diaz and Jeff Walker attended the SOD/CIO Focus Group Meeting in Kansas City. The CIO Paul Chan and members from his staff were in attendance and the Regions were present. The purpose of this meeting was to focus on a couple of IT Issues and develop plans and milestones to address these issues. Topics covered were Patch Management, NWSNet migration, and looking how best to develop tailored IT Security Policies.